Thomas & Betts

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# **Economy Battens Installation Manual**

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## **GREETINGS**

Congratulations on choosing to use this Thomas & Betts product covered by our unique Through-Life Support system. This document is designed to assist you during the installation of the product, to ensure the safety of yourself and others.

The battens are designed to be installed quickly and easily however, **Thomas & Betts recommends that you read this document thoroughly before commencing installation.** This device has been manufactured to provide trouble free operation for many years, when treated with due care and maintained through regular and appropriate servicing.

## SAFETY WARNING

In Australia and New Zealand, only licensed electricians are permitted by law to work with 240 Volts electrical installations.

Do not attempt to install or connect this product unless you are a licensed electrician

Turn off and isolate the electrical supply before connecting this fitting to the building wires.

Do not touch the terminals of the terminal block when the light fitting is energised.

The only user serviceable parts are the lamp/s and battery pack.

Do not tamper with the fitting or the warranty will be void.

As the installer, it is your responsibility to ensure compliance with all relevant building and safety codes, (ie: AS3000, AS/NZS2293).

Refer to the applicable standards for mains cabling installation procedures and requirements.

#### INSTALLATION INSTRUCTIONS

To install the battens, follow these steps:

- Remove the batten from the packing box and inspect it for damage or imperfections. If any damage is found, do not install
  the batten, replace it carefully into the packing box and notify the Thomas & Betts Product Support Hotline in Australia on
  1300 666 595.
- If all looks okay, proceed with the installation. Remove the lid and use a pencil to mark the position of the mounting screw holes for the batten.
- 3. Fit the test switch and LED. Route the mains cable through the cable entry hole.
- 4. Strip and connect the mains cable to the terminal block and earth as listed below using a suitably sized screwdriver.
- The unswitched active wire connects to the terminal marked U/A or ACTIVE UN/SW
- The switched active wire connects to the terminal marked A or S/A
- The **neutral** wire connects to the terminal marked **N**
- The earth wire connects to the terminal marked E

Ensure that the stripped wire ends are completely inserted into the terminal block and no bare conductors are exposed to the metal. You will also need to mechanically protect mains cable with a grommet, gland or bush as they pass through the cable entry hole. Be careful with multi-strand conductors that all of the strands are twisted together before insertion into the terminal. Any stray strands that inadvertently come into contact with their neighbouring terminal or the metal will cause undesirable results when the batten is powered. Replace the lid back on the gear tray.

- 5. Fit the fluorescent lamp/s as per the size of the fitting (lamp/s not supplied with the fitting).
- Lamp operation:

**Maintained Batten:** Once powered up, in a maintained batten the normal AC lamp (if present) should lights up and stays on until the power supply fails. The emergency function of the unit should only operate when the unswitched active power supply fails or when somebody presses the manual test button located on the side of the fitting. Normal status of the fitting when powered indicating LED steady red. This indicates that the power is connected and the battery is charging.

**Non-maintained Batten:** Once powered up, in a non-maintained batten the present lamp stays off. The emergency function of the unit should only operate when the unswitched active power supply fails or when somebody presses the manual test button located on the side of the fitting. Normal status of the fitting when powered indicating LED steady red. This indicates that the power is connected and the battery is charging.

7. Check the operation of the fitting to ensure that the installation was successful. When powered up, allow a few minutes to give the battery a small charge, then press the manual test button located on the side of the fitting. Press and hold the test button for a few seconds and observe that the emergency lamp lights up and stays on until the test switch is released. If the lamp works only momentarily, this ensures that the connections are correct and the battery requires at least 16 hours to fully charge. If the lamp doesn't work at all, check the supply, the connections and the trouble shooting guide at the end of this document.

## TO REMOVE THE BATTEN FROM THE INSTALLATION

Before removing the installed batten, switch off the mains supply to the fitting. Remove the lid by unscrewing two screws as shown in Figure 1. Unscrew the unswitched active, switched active, neutral and earth cable connection from the terminal block using suitably sized screwdriver. Disconnect the battery plug from the battery and then unscrew the mounting screws of the gear tray. When the fitting is reconnected to the supply, it will need time to recharge its battery before it will be capable of a full length discharge again.

# TESTING PRECAUTIONS

Complete Solutions in Emergency Lighting

If the fitting is to be left permanently connected to the mains supply from now on, you will need to allow 24 hours to charge its battery and then you will have to conduct a manual discharge test as per the requirements of AS/NZS2293.2. Presently (at the time of writing), the standard requires that new fittings operate in emergency mode for at least 2 hours for their first test. Subsequent tests are required every 6 months; fittings are then required to operate for not less than 90 minutes. You will need to keep records of the initial test into the building emergency service logbook.

If the fitting isn't permanently connected to mains supply at this time, you are responsible for giving it the initial 2 hour test when you do connect it permanently to the mains supply.

## **CONSTRUCTION SITES**

Continuously switching on and off the mains supply to the fittings during the installation process (due to building works or for some other reason), could cause the fittings to discharge and charge their batteries many times over a short period which may shorten the life of the battery. Thomas & Betts does not recommend such practices and may not honour any warranty on the life of the batteries or the lamp when subjected to such harsh operating conditions. The fittings are designed to be regularly discharge tested once every 6 months as per AS/NZS2293.2. In order to prevent damage to the battery, leave the unswitched active circuit turned off at the circuit breaker, until the emergency lighting is required on the site.

#### TROUBLE SHOOTING GUIDE

If you've installed and connected the batten as per the instructions listed earlier and it doesn't work properly, use the following table as a guide to fixing the problem. Look up the type of fault in the left column and check the possible causes from the right column.

#	Fault	Possible Causes
1	Red LED not lit	AC supply not commected; or AC supply turned off; or Battery plug not connected to battery pack; or Test switch damaged
2	Red LED is lit but AC lamp not lit when connected to mains	Switch active supply turned off; or Missing loop from unswitched to switched active; or Lamp damaged; or Lamp not inserted properly
3	LED is lit but lamp doesn't come on when test switch is pressed	Lamp damaged; or Lamp not inserted properly; or Battery pack damaged; or Test switch damaged
4	Lamp is lit momentarily when test switch is pressed; or When mains fail	Battery not fully charged (allow up to 24 hours); or Battery pack damaged

If the unit still doesn't work after checking these possible causes, contact Thomas & Betts Service in Australia on 1300 666 595, Monday to Friday, 8.30am to 4.30pm (AEST) and ask for help. Our trained service personnel will usually be able to take your call immediately and assist you in resolving your difficulty. Thomas & Betts is committed to providing valuable Through-Life Support for its products.